PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

NABL accredited program as per ISO/IEC 17043:2010 standard

Organized By Department of Hematology, AIIMS, New Delhi-110029

NABL Certificate No. PC - 1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 2608 **Distribution No.:** 147-F **Month/Year:** June/2019

Instrument ID: Vec3diff (0771027150846)

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 30-08-2019[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10^3/µl	1	5.6	5.5	11.1	10.2	0.0570	**0.87**	0.1	0.1	0.0100	**0.00**
RBC x10^6/µl	1	3.78	3.77	7.55	7.31	0.0070	**1.19**	0.01	0.03	0.0040	**-0.54**
Hb g/dl	1	11.8	11.9	23.7	23.2	0.0250	**0.84**	-0.1	0.1	0.0070	**-2.70**
HCT%	1	32.9	32.8	65.7	70.95	0.2030	**-0.84**	0.1	0.3	0.0240	**-0.54**
MCV-fl	1	87	87	174	194.6	0.4210	**-1.24**	0	0.2	0.0230	**-0.34**
MCH-Pg	1	31.2	31.6	62.8	63.5	0.0710	**-0.41**	-0.4	0.2	0.0200	**-2.70**
MCHC-g/dl	1	35.9	36.3	72.2	65.05	0.1670	**1.18**	-0.4	0.3	0.0190	**-2.36**
Plt. x10^3/µl	1	227	212	439	333	2.48	**2.89**	15	4	0.37	**2.83**
Retic %	2	8.5	9	17.5	18	0.29	**-0.06**	-0.5	0.5	0.04	**-1.50**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=08% , Poly=62 L=05%, E=00, Mono/Promono=00 , B1=00 P.M.=12%, Mye=08%, Meta=04%, Other=Basophil 1%	Poly: 65-75, Lymph: 2-8, nRBC/Eo/Mono/Pro/Blast: 0-5, Myelo: 2-6, Meta: 4-10
RBC Morphology	3	Normocytic-Normochromic Type	Predominantly: Normocytic Normochromic, Moderate: Anisocytosis, Mild: Hypochromic
Diagnosis	3	Chronic Myeloproliferative Disorder-CML Chronic Phase	Chronic Myeloid Leukemia-Chronic Phase [CML-CP]

EQAP Code No.: 2608 *Distribution No.: 147-F* *Month/Year: June/2019* *Instrument ID: Vec3diff (0771027150846)*

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10^3/µl	1	450	349	87.11	83.95	7.16	9.74	7.74	6.88
RBC x10^6/µl	1	450	349	88.25	79.37	4.87	12.61	7.74	8.6
Hb g/dl	1	450	349	84.53	85.96	7.74	9.74	8.31	4.58
HCT%	1	450	349	93.41	79.66	5.16	9.46	2.01	11.17
MCV-fl	1	450	349	92.84	90.83	5.44	4.01	2.29	6.3
MCH-Pg	1	450	349	85.96	87.68	6.88	6.59	8.02	5.73
MCHC-g/dl	1	450	349	96.56	83.67	1.43	7.16	2.29	9.46
Plt. x10^3/µl	1	450	349	84.53	83.95	7.45	7.74	9.74	9.74
ReticCount%	2	450	314	99.36	85.35	2.23	12.1	0.96	5.1
PS Assessment	3	450	337	Acceptable:90.7 %,Warning Signal:4.8 %,Unacceptable :4.5 %					

***Comments:**

1). Among Lab (EQA) : Results acceptable.

2). Within Lab (IQA) : Precision acceptable.

Note-1: EQA (External Quality Assurance) : Your Performance among various of participating labs in PT, to determine the accuracy of your results.
IQA (Internal Quality Assurance) : Your Performance of comparison of two consecutive measurement values within your lab to test the precision of your autoanalyzer.

Note-2: Z score among & within lab were calculated, as per to ISO/IEC 13528:2015 standard. Z score among lab (EQA)= (Your Result Sum of two values – Consensus Result sum of two values)/(Normalised IQR)
Z score within lab (IQA)= (Your Result Difference of two values – Consensus Result difference of two values)/(Normalised IQR)
IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

Note-3: Z score 0 to ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

Note-4: Z score value between"0 to ±2" are texted in green colour. Z score value between"±2 to ±3" are texted in orange colour. Z score value > ±3 are texted in red colour.

Note-5: Homogeneity and stability testing of PT sample were done as per ISO 13528:2015 standard. To pass homogeneity test, between sample SD (Ss) should be smaller than the check value (0.3*SDPA). To pass the stability test, average difference in measurement values of first and last day sample ($\bar{x}$-$\bar{y}$) should be smaller than the check value (0.3*SDPA).

Note-6: ISHTM-AIIMS-EQAP does not subcontract any task of its scheme

Note-7: Participants are free to use methods/analyzer of their own choice.

Note-8: Proficiency testing (PT) samples are sent quarterly to each participant.

Note-9: All the necessary details regarding design and implementation of PT, are provided in the instruction sheet as well as on programme's website www.ishtmaiimseqap.com.

Report authorized by,

Dr. R. Saxena
Prof & Head, Hematology, AIIMS, Delhi.
PT Co-ordinator: ISHTM-AIIMS-EQAP

----------End Of Report----------

PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

NABL accredited program as per ISO/IEC 17043:2010 standard

Organized By Department of Hematology, AIIMS, New Delhi-110029

NABL Certificate No. PC - 1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 2608 **Distribution No.:** 149-F **Month/Year:** December/2019

Instrument ID: VECTOR-3 (0771027150846)

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 09-03-2020[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10^3/µl	1	6	6	12	11.63	0.0270	**0.46**	0	0.1	0.0080	**-0.79**
RBC x10^6/µl	1	4.01	4	8.01	8.06	0.0070	**-0.24**	0.01	0.04	0.0020	**-0.67**
Hb g/dl	1	11.3	11.3	22.6	22.2	0.0200	**0.60**	0	0.1	0.0070	**-0.67**
HCT%	1	32.7	32.5	65.2	66.8	0.1410	**-0.35**	0.2	0.3	0.0210	**-0.27**
MCV-fl	1	81.5	81.3	162.8	166.25	0.3130	**-0.31**	0.2	0.2	0.0200	**0.00**
MCH-Pg	1	28.3	28.2	56.5	55	0.0540	**1.01**	0.1	0.2	0.0100	**-0.45**
MCHC-g/dl	1	34.8	34.6	69.4	66.7	0.1380	**0.53**	0.2	0.3	0.0190	**-0.27**
Plt. x10^3/µl	1	196	193	389	340	0.92	**1.81**	3	6	0.32	**-0.51**
Retic %	2	4.5	4	8.5	7.5	0.25	**0.27**	0.5	0.4	0.02	**0.45**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=04 , Poly=47 L=02, E=02, Mono/Promono=00 , B1=05 P.M.=12, Mye=10, Meta=14, Other=09% Basophil	Poly: 50-60, Lymph: 2-6, nRBC/Eo/Mono/Blast/Pro: 0-5, My: 10-20, Meta: 10-15
RBC Morphology	3	Normocytic Normochromic, mild hypochromic, elliptocytes	Predominantly: Normocytic Normochromic. Moderate: Micro. Mild: Hypo, Aniso.
Diagnosis	3	Chronic Myeloproliferative neoplasm, CML accelerated phase	Chronic Myeloid Leukemia (Chronic Phase) : CML-CP

EQAP Code No.: 2608 *Distribution No.: 149-F* *Month/Year: December/2019* *Instrument ID: VECTOR-3 (0771027150846)*

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10^3/µl	1	450	366	90.98	84.97	3.28	6.83	5.19	7.1
RBC x10^6/µl	1	450	366	89.89	88.25	5.46	5.19	4.1	6.01
Hb g/dl	1	450	366	92.08	86.89	4.92	3.83	2.46	8.74
HCT%	1	450	366	95.08	90.16	3.01	5.74	1.37	3.55
MCV-fl	1	450	366	96.99	95.63	1.37	1.64	1.09	2.19
MCH-Pg	1	450	366	87.7	89.62	7.65	5.19	4.1	4.64
MCHC-g/dl	1	450	366	97.54	88.25	1.64	4.92	0.27	6.28
Plt. x10^3/µl	1	450	366	89.34	91.53	7.92	4.64	1.91	3.01
ReticCount%	2	450	301	94.02	74.75	2.99	20.6	2.99	7.64
PS Assessment	3	450	349	Acceptable:96.2%,Warning Signal:3.2%,Unacceptable :0.6%					

***Comments:**

1). Among Lab (EQA) : Results acceptable.

2). Within Lab (IQA) : Precision acceptable.

Note-1: EQA (External Quality Assurance) : Your Performance among various of participating labs in PT, to determine the accuracy of your results.
IQA (Internal Quality Assurance) : Your Performance of comparison of two consecutive measurement values within your lab to test the precision of your autoanalyzer.

Note-2: Z score among & within lab were calculated, as per to ISO/IEC 13528:2015 standard. Z score among lab (EQA)= (Your Result Sum of two values – Consensus Result sum of two values)/(Normalised IQR)
Z score within lab (IQA)= (Your Result Difference of two values – Consensus Result difference of two values)/(Normalised IQR)
IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

Note-3: Z score 0 to ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

Note-4: Z score value between"0 to ±2" are texted in green colour. Z score value between"±2 to ±3" are texted in orange colour. Z score value > ±3 are texted in red colour.

Note-5: Homogeneity and stability testing of PT sample were done as per ISO 13528:2015 standard. To pass homogeneity test, between sample SD (Ss) should be smaller than the check value (0.3*SDPA). To pass the stability test, average difference in measurement values of first and last day sample ($\bar{x}$-$\bar{y}$) should be smaller than the check value (0.3*SDPA).

Note-6: ISHTM-AIIMS-EQAP does not subcontract any task of its scheme

Note-7: Participants are free to use methods/analyzer of their own choice.

Note-8: Proficiency testing (PT) samples are sent quarterly to each participant.

Note-9: All the necessary details regarding design and implementation of PT, are provided in the instruction sheet as well as on programme's website www.ishtmaiimseqap.com.

Report authorized by,

Dr. R. Saxena
Prof & Head, Hematology, AIIMS, Delhi.
PT Co-ordinator: ISHTM-AIIMS-EQAP

----------End Of Report----------

PROFICIENCY TESTING REPORT

ISHTM-AIIMS EXTERNAL QUALITY ASSURANCE PROGRAMME

NABL accredited program as per ISO/IEC 17043:2010 standard

Organized By Department of Hematology, AIIMS, New Delhi-110029

NABL Certificate No. PC - 1002

Duration of stability testing - minimum upto 8 days at ambient temp. after dispatch of specimens

EQAP CODE No. : 2608 **Distribution No.:** 151-F **Month/Year:** September/2020

Instrument ID: B7961

Name & Contact No. of PT Co-ordinator: Dr. Seema Tyagi (Prof.), Hematology, AIIMS, Delhi,
Tel: 9013085730 , E-Mail : accuracy2000@gmail.com

Date of issue & status of the report: 12-01-2021[Final].

CBC and Retic Assessment

Test Parameters	S.No.			Among Lab (Accuracy Testing)				Within Lab (Precision Testing)			
		Your Result 1	Your Result 2	Your Results Sum of 2 Value	Consensus result sum of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score	Yours Results Diff. of 2 Values	Consensus Result Diff. of 2 values (Assigned Value)	Uncertainty of Assigned Values	Z Score
WBC x10^3/µl	1	4.7	4.3	9	7.9	0.0460	**0.96**	0.4	0.1	0.0070	**2.89**
RBC x10^6/µl	1	3.75	3.63	7.38	7.1	0.0080	**1.27**	0.12	0.04	0.0260	**2.16**
Hb g/dl	1	12.6	12.4	25	24.3	0.0230	**1.35**	0.2	0.1	0.0080	**0.67**
HCT%	1	38.4	37.2	75.6	78.1	0.2260	**-0.43**	1.2	0.4	0.0280	**1.80**
MCV-fl	1	102.5	102.4	204.9	220.2	0.5740	**-0.93**	0.1	0.4	0.0320	**-0.45**
MCH-Pg	1	34.2	33.6	67.8	68.2	0.0820	**-0.20**	0.6	0.3	0.0230	**1.01**
MCHC-g/dl	1	33.3	32.8	66.1	61.55	0.1700	**0.97**	0.5	0.3	0.0220	**0.54**
Plt. x10^3/µl	1	263	262	525	409	2.14	**2.07**	1	7	0.47	**-0.90**
Retic %	2	21	20	41	31.25	0.59	**0.60**	1	1	0.07	**0.00**

P.S . Assesment

		YOUR REPORT	CONSENSUS REPORT
DLC%	3	Nrbcs=2-4 , Poly=02 L=04, E=00, Mono/Promono=00 , B1=>90 % LARGE ATYPICAL CELLS SEEN WITH ROUND TO CLEAVED NUCLEI, 1-2 NUCLEOLI FINE TO MILDLY COARSE CHROMATIN N MODERATE AMOUNT OF CYTOPLASM P.M.=-, Mye=-, Meta=-, Other=-	Blasts: 65-85, Lymph: 2-6, nRBC/Poly/Eo/Mono: 0-5, Pro: 0-10, Myelo/Meta: 0-5
RBC Morphology	3	NORMOCYTIC NORMOCHROMIC TO MILD HYPOCHROMIC TYPE O MILD N	Predominantly: Normocytic, Normochromic. Moderate: Microcytic. Mild Anisocytosis.
Diagnosis	3	ACUTE LEUKEMIA	Acute Leukemia (Myeloid Lineage)

EQAP Code No.: 2608 *Distribution No.: 151-F* *Month/Year: September/2020* *Instrument ID: B7961*

COMBINED DATA VALUES OF TOTAL PARTICIPANTS

Test parameters	S.No.	Total participants covered in the current dist.	Total No. responded	% of Labs with Z Score 0-2		% of Labs with Z Score 2-3		% of Labs with Z Score >3	
				Among labs	Within lab	Among labs	Within lab	Among labs	Within lab
WBC x10^3/µl	1	450	268	91.04	81.72	5.22	7.84	4.1	7.09
RBC x10^6/µl	1	450	268	88.43	86.57	4.85	2.61	6.72	7.09
Hb g/dl	1	450	268	84.33	85.07	5.6	5.6	10.07	8.58
HCT%	1	450	268	93.66	86.19	4.1	3.73	1.87	7.46
MCV-fl	1	450	268	96.64	93.28	1.87	2.61	1.49	4.1
MCH-Pg	1	450	268	86.19	85.07	6.34	5.6	7.46	7.46
MCHC-g/dl	1	450	268	96.27	82.84	1.87	7.46	1.12	7.09
Plt. x10^3/µl	1	450	268	91.79	89.55	4.85	3.73	3.36	6.72
ReticCount%	2	450	240	97.08	92.08	3.33	3.33	0.42	5
PS Assessment	3	450	252	Acceptable:91.8%,Warning Signal:4.3%,Unacceptable :3.9%					

***Comments:**

1). Among Lab (EQA) : Results acceptable.

2). Within Lab (IQA) : Precision acceptable.

Note-1: EQA (External Quality Assurance) : Your Performance among various of participating labs in PT, to determine the accuracy of your results.
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IQR = Quartile 3 - Quartile 1 of participant data, Normalised IQR = 0.7413 x IQR

Note-3: Z score 0 to ±2: Acceptable, Z score ±2 to ±3 :Warning Signal, Z score > ±3 : Unacceptable [As per ISO/IEC 13528:2015 standard]

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Note-5: Homogeneity and stability testing of PT sample were done as per ISO 13528:2015 standard. To pass homogeneity test, between sample SD (Ss) should be smaller than the check value (0.3*SDPA). To pass the stability test, average difference in measurement values of first and last day sample ($\bar{x}$-$\bar{y}$) should be smaller than the check value (0.3*SDPA).

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Report authorized by,

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PT Co-ordinator: ISHTM-AIIMS-EQAP
Department of Hematology, AIIMS, New Delhi

----------End Of Report----------